

What is Claimed:

1 1. A method of packaging a semiconductor device, the
2 method comprising the steps of:

3 applying an insulative material across only a portion of at
4 least two of a plurality of conductors providing interconnection between
5 elements in the semiconductor device; and

6 encapsulating the conductors and elements, thereby
7 packaging the semiconductor device.

1 2. The method of claim 1 further comprising the step of:

2 curing the insulative material after said applying step.

1 3. The method of claim 2 wherein said curing step
2 includes at least one of heating the insulative material and exposing the
3 insulative material to UV radiation.

1 4. The method of claim 1 wherein said applying step
2 includes applying an insulative compound comprising spherical silica
3 particles to the portion of a plurality of conductors.

1 5. The method of claim 4 wherein the insulative
2 compound is applied in a substantially circumferential manner about an
3 inner element of the semiconductor device.

1 6. The method of claim 4 wherein the insulative
2 compound is applied in at least two geometric shape structures, each of
3 the geometric shape structures substantially surrounding an inner element
4 of the semiconductor device in a circumferential manner.

1 7. The method of claim 1 wherein said applying step
2 includes applying a solid insulator having an adhesive backing to the

3 portion of a plurality of conductors such that the adhesive backing is in
4 contact with the portion of a plurality of conductors.

1 8. The method of claim 1 wherein said applying step
2 includes applying an insulative tape to the portion of a plurality of
3 conductors.

1 9. The method of claim 1 wherein said applying step
2 includes applying a continuous bead of the insulative material across only
3 a portion of at least two of a plurality of conductors providing
4 interconnection between elements in the semiconductor device.

1 10. The method of claim 1 wherein said applying step
2 includes applying the insulative material around a peripheral portion of an
3 inner element of the semiconductor device.

1 11. The method of claim 1 wherein said applying step
2 includes applying the insulative material in at least two distinct structures
3 around a peripheral portion of an inner element of the semiconductor
4 device, the two structures not being in contact with one another.

1 12. A semiconductor device comprising:

2 a plurality of semiconductor elements;

3 a plurality of conductors providing interconnection between
4 said plurality of semiconductor elements; and

5 an insulative material applied across only a portion of at least
6 two of said plurality of conductors.

1 13. The semiconductor device of claim 12 further
2 comprising an encapsulation layer encapsulating said conductors and
3 elements for packaging said semiconductor device.

1 14. The semiconductor device of claim 12 wherein said
2 plurality of semiconductor elements includes at least one semiconductor
3 die having a plurality of first contacts, and a lead frame having a plurality
4 of second contacts, said plurality of conductors providing interconnection
5 between said plurality of first contacts and said plurality of second
6 contacts.

1 15. The semiconductor device of claim 14 wherein said
2 insulative material is disposed across said portion of said at least two of
3 said plurality of conductors adjacent said semiconductor die.

1 16. The semiconductor device of claim 14 wherein said
2 insulative material is disposed across said portion of said at least two of
3 said plurality of conductors approximately midway between said
4 semiconductor die and said leadframe.

1 17. The semiconductor device of claim 12 wherein said
2 insulative material is a curable insulative material.

1 18. The semiconductor device of claim 12 wherein said
2 insulative material is at least one of a heat induced curable insulative
3 material and a UV radiation curable insulative material.

1 19. The semiconductor device of claim 12 wherein said
2 insulative material is comprised of a plurality of spherical silica particles.

1 20. The semiconductor device of claim 12 wherein said
2 insulative material is applied around a peripheral portion of an inner
3 element of said semiconductor device.

1 21. The semiconductor device of claim 12 wherein said
2 insulative material is applied in at least two distinct structures around a
3 peripheral portion of an inner element of said semiconductor device, said
4 two structures not being in contact with one another.

1 22. The semiconductor device of claim 12 wherein said
2 insulative material includes a substantially solid insulator having an
3 adhesive component such that said adhesive component is in contact with
4 said portion of said at least two of said plurality of conductors.

1 23. The semiconductor device of claim 12 wherein said
2 insulative material is an insulative tape.